

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/771,758 02/04/2004 Ki-Ho Lee 2003P02062US01; 3665 60427-616 **EXAMINER** 24500 7590 09/08/2005 SIEMENS CORPORATION HARRIS, KATRINA B INTELLECTUAL PROPERTY LAW DEPARTMENT PAPER NUMBER ART UNIT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830 3747

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		$\epsilon$
	Application No.	Applicant(s)
	10/771,758	LEE, KI-HO
Office Action Summary	Examiner	Art Unit
	Katrina B. Harris	3747
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1)⊠ Responsive to communication(s) filed on 23 Au	ugust 2005.	
	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
<ul> <li>4)  Claim(s) 1,2,6-19 and 21-26 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,2,6-19 and 21-26 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>		
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior application from the International Bureau  * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

#### **DETAILED ACTION**

Claims 1, 2, 6-19 and 21-26 are pending in this application.

### Response to Amendment

The amendment to the claims filed on August 23, 2005 does not comply with the requirements of 37 CFR 1.121(c) because claims 25 and 26 were not addressed. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

- (c) Claims. Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).
- (1) Claim listing. All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of "canceled" or "not entered" may be aggregated into one statement (e.g., Claims 1–5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.
- (2) When claim text with markings is required. All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "currently amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having

Application/Control Number: 10/771,758

Art Unit: 3747

the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

- (3) When claim text in clean version is required. The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, i.e., without any markings in the presentation of text. The presentation of a clean version of any claim having the status of "original," "withdrawn" or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented." Any claim added by amendment must be indicated with the status of "new" and presented in clean version, i.e., without any underlining.
  - (4) When claim text shall not be presented; canceling a claim.
- (i) No claim text shall be presented for any claim in the claim listing with the status of "canceled" or "not entered."
- (ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as "canceled" will constitute an instruction to cancel the claim.
- (5) Reinstatement of previously canceled claim. A claim which was previously canceled may be reinstated only by adding the claim as a "new" claim with a new claim number.

Since the reply filed on August 23, 2005 appears to be *bona fide*, the amendment submitted will be considered as not entered. This action will address claims presented in previous action filed March 14, 2005.

Due to further consideration of the previously cited reference in the Final Rejection of the June 09, 2005 office action, the finality of the rejection of the Office action is withdrawn.

## Allowable Subject Matter

The indicated allowability of claim 21-23 is withdrawn in view of further consideration of previously cited prior art. Rejections based on previously cited reference(s) follow.

## Response to Arguments

Applicant's arguments filed August 23, 2005 have been fully considered but they are not persuasive. It is inherently necessary that the length of the fuel injector be longer than the thickness of the carrier wall, in order for the fuel injector to immerge from the opening of the carrier and inject fuel properly into the cylinder.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 9, 11-13 and 15-19, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Oishi (2001/0047791). Oishi discloses an air induction body assembly for a vehicle, comprising: a carrier (11) having a first sealing interface for a manifold and a second sealing interface for an engine cylinder; at least one air opening extending through said carrier, said at least one air opening for communicating air to the engine cylinder(5), and at least one valve mounted to said carrier (11), said at least one valve for controlling the communication of air through said at least one opening.

Regarding claim 2, wherein said valve (12,15) comprises a flap, said flap pivotally mounted to said carrier (11) by a shaft (17).

Regarding claim 6, wherein the shaft (17) is mounted on said carrier (11) by a bearing surface.

Regarding claim 9, an actuator (DC motor, see paragraph [0017]) mounted to said carrier (11).

Regarding claim 11, wherein said at least one air opening comprises a plurality of air openings and said at least one valve comprises a plurality of valves (12, 15) for controlling air through said plurality of air openings, and including a shaft (17) interconnecting said plurality of valves.

Regarding claims 12 and 13, wherein the carrier (2) has a support for a fuel injector (19).

Regarding claim 15, carrier air passage (3).

Regarding claim 18, see claim 9 above.

Regarding claim 19, carrier (11) having a thickness less than a length of said fuel injector.

Regarding claim 25, wherein said fuel injector (19) has a discharge end portion for discharging fuel and a receiving end portion for receiving fuel, said at least one valve located closer to said discharge end portion for discharging fuel than to said receiving end portion for receiving fuel.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi (2001/0047791). Oishi discloses the claimed invention except having a ball bearing. It would have obvious to one of ordinary skill in the art at the time of the invention to use a ball bearing in the invention of Oishi since it is well know in the art.

Regarding claim 8, Oishi discloses the claimed invention except the use of a sleeve bearing. It would have obvious to one of ordinary skill in the art at the time of the invention to use a ball bearing in the invention of Oishi since it is well know in the art.

Claims 10, 14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi (2001/0047791) in view of Lee et al (2003/0230285).

Regarding claim 10, Oishi discloses the claimed invention except the use of a second sealing interface. Lee et al. discloses the use of a second sealing interface. It would have obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Oishi to include a second sealing interface to improve sealing efficiency.

Regarding claim 14, Oishi discloses the claimed invention except the use of a wire embedded in the carrier. Lee et al. discloses the use of a wire embedded in the carrier. It would have obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Oishi to include a wire embedded in the carrier to improve efficiency of the system.

#### Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katrina B. Harris whose telephone number is 571-272-4842. The examiner can normally be reached on 6:30 AM -3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 571-272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**KBH** 

MAHMOUD GIMIE
PRIMARY EXAMINER

Katrina B. Harris

Examiner

Art Unit 3747